

REMARKS

A. Status

U.S. Patent No. 6,395,578 issued on May 28, 2002 with claims 1-35. The '578 patent has not been the subject of a previous reissue application, a certificate of correction, a reexamination, or a litigation.

B. Amendment

The only change sought to be made in this reissue application is an amendment to claim 1, at column 12, line 50. The word "first" is deleted, and replaced by the word "second:"

receiving in each through hole a semiconductor chip having a first major surface, and an opposite second major surface provided with a plurality of input/output pads thereon, wherein the second major surface of the chip faces in the same direction as the [first] second major surface of the respective circuit board;

No new matter is added by this amendment, as indicated by the specification excerpts provided below.

The original claim 1 is erroneous because claim 1 does not cover any of the exemplary embodiments disclosed in the specification. That is, in all of the exemplary embodiments, the second major surface of the chip, which includes the input/output pads, faces in the same direction as the second major surface of the circuit board, which includes the bond fingers. Claim 1 erroneously recites these surfaces as facing in opposite directions, and thus excludes the exemplary embodiments.

The error in claim 1 may be understood by reference to the specification. Referring to column 6, lines 11-18, disclosure is made of a semiconductor chip 30, as follows:

[I]n FIG. 1, the semiconductor package, which is denoted by the reference numeral 101, includes a

semiconductor chip 30 having a first major surface 30a (a lower surface in FIG. 1) and a second major surface 30b (an upper surface in FIG. 1). A plurality of input/output pads 31 are formed at the second major surface 30b of the semiconductor chip 30.

Hence, with respect to Figs. 1-5 and 7B, it is the upward-facing second major surface 30b of semiconductor chip 30 that includes the input/output pads 31.

Further, at column 6, lines 22-32, disclosure is made of a circuit board 10, as follows:

The circuit board 10 includes a resin substrate 17 having a first major surface 11a (a lower surface in FIG. 1) and a second major surface 11b (an upper surface in FIG. 1). The through hole 12 is centrally formed through the resin substrate 17. The resin substrate 17 is provided at the first major surface 11a thereof with a conductive circuit pattern 18 having a plurality of ball lands 18b. The conductive circuit pattern 18 is arranged around the through hole 12. The resin substrate 17 is also provided at the second major surface 11b thereof with another conductive circuit pattern 18 having a plurality of bond fingers 18a.

Hence, with respect to Figs. 1-5 and 7B, it is the upward-facing second surface 11b of the resin substrate 17 of circuit board 10 that includes the bond fingers 18a.

Therefore, in the exemplary embodiments of Figs. 1-5 and 7B, the second surface 30b of semiconductor chip 30, which has input/output pads 31, is oriented in the same direction as the second surface 11b of resin substrate 17 of circuit board 10, which has the bond fingers 18a.

In the original claim 1, however, it is stated that "the second major surface of the chip faces in the same direction as the *first* major surface of the respective circuit board." This is erroneous, because this recitation excludes from the claim

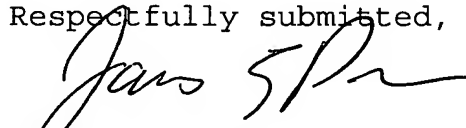
the exemplary embodiments shown in the drawings and described in the specification.

Since claim 1 is the sole independent claim of the patent, all of the claims are infected by this error. Hence, the patent is wholly or partly inoperative or invalid, by reason of the patentee claiming more or less than the patentee had a right to claim in the patent.

Accordingly, it is requested that claim 1 be amended as indicated above, so at least the exemplary embodiments will be within the claim. It is submitted that the aforementioned error is an error upon which reissue can be based, since the amendment alters the scope of all of the claims. It is noted that, in the Examiner's Statement of Reasons for Allowance in the Notice of Allowance mailed on September 17, 2001, the Examiner recited the erroneous language of claim 1.

If there are any questions, please telephone the undersigned at 408 451-5906 to expedite prosecution of this case.

Respectfully submitted,



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